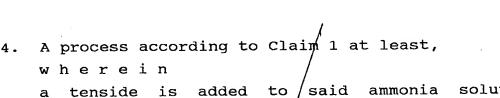


## Amended Claims

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[received by International Office on April 3, 1992; original claims 1, 7 and 8 superseded by amended claim 1; claims 7 and 10 superseded by new claims 7 and 8; all further claims unchanged (2 pages)]

- A process for producing aluminium oxide beads, in which an acid aluminium oxide sol or an acid aluminium oxide suspension is produced and converted into droplets, said droplets are chagulated in an aqueous ammonia solution, and the gel beads thereby formed are aged, washed, dried and calcined,
  - wherein said aluminium oxide hydrosol droplets are generated by a vibrated nozzle plate having several nozzles, wherein said droplets are pre-solidified by separate lateral blowing with ammonia gas or by blowing with ammonia gas in the case of of plets from the ring interior and from the\_ring\_exterior nozzle ring in order of a and wherein said droplets, pre-solidify such pre-solidified /droplets are then collected in ammonia solution.
- A process for producing aluminium oxide beads according to Claim 1, wherein said aluminium oxide sol or aluminium oxide suspension can have a viscosity in the range from 10 to 500 mPa·s at room température.
- A process according to Claim 1, 3. where i/n said nozzle plate is vibrated at a vibration frequency of 10 Hz to 20000 Hz, preferably 50 Hz to 12000 Hz.



a tenside is added to said ammonia solution for formation of a foam layer, and a gas such as ammonia-containing air, hitrogen or argon is blown in and/or a separate tenside solution is used for foam generation.?

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5. A process according to Claim 4,
wherein
said foam layer has a depth in the range from 5 to 50
mm.

6. A process according to Claim 1,
where in
said gel beads are dried at temperatures between 20°C
and 300°C over a period of 1 to 24 hours.

7. A process according to Claim 1, where in said droplets are blown from the ring interior with  $NH_3$ .

8. A process according to at least one of the preceding claims,
wherein
said dried beads are calcined or activated for 2 h to
12 h at temperatures from 500°C to 700°C.

and by

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